

SUMMING UP

Results of a recent macroeconomic model for Indonesia suggest:

1. Growth in Indonesia's GDP will slow from 6.5% in 2011 to 5.8% in 2012, unless changes in government policy compensate for the slowdown of the world economy. Most hard hit will be the non-poor, but the poor will also feel the effects of the slowdown in terms of fewer regular jobs and lower income growth.
2. World macroeconomic developments in 2012 are especially difficult to predict because they will be affected to an unusual degree by political decisions. This heightened uncertainty requires a flexible policy response to protect the poor.
3. In addition to a slowdown in economic growth, the poor in Indonesia will be hit by more rapid inflation due to an increase in the price of petroleum products, which might not be accompanied by a compensatory cash transfer program.

The review of child malnutrition in Indonesia has four important findings:

1. Child malnutrition is an acute health and social problem in Indonesia. According to the UNICEF, more than one-third of all Indonesian children under the age of five suffer from stunting. In 2010 Indonesia had the fifth largest number of children in the world suffering from stunting. (Stunting refers to short height for age and generally shows the long-term effects of inadequate nutrition and poor health status).
2. The high level of child malnutrition in Indonesia is caused by: low parental education; declining rates of breastfeeding; poor complementary feeding practices; and the fact that pregnant mothers are often anemic and underweight.
3. One key policy intervention to reduce stunting is to ensure that infants are: (a) exclusively breastfed for the first six months; and (b) then are given appropriate complementary feeding and continued breast feeding until two years of age. These two practices would reduce the rate of stunting in Indonesia by about 15 percent.
4. Another important policy intervention would be to improve the health and nutrition services provided by the local Posyandu Centers. These centers need to be staffed by people who are trained in young child feeding.

Growth Forecast for 2012

Results from a macroeconomic model by Papanek, Basri and Schydlofsky (2012) suggest that Indonesian GDP will slow as a result of a general slowdown in the world economy.

Indonesian growth will slow as growth in the world economy only reaches 2.5% in 2012,¹ compared with 4.1% in 2010 and 2.7% in 2011 (Table 1).

Table 1: Growth Forecasts for the World and Indonesia for 2012

	June 2011	January 2012
World GDP by World Bank	3.6%	2.5%
World GDP by J.P. Morgan	--	2.0%
Indonesia GDP by World Bank	6.7%	6.1%
Indonesia GDP by J.P. Morgan	--	5.2%
Indonesia GDP by SEADI Model	--	5.8%

With demand for commodities growing more slowly and export prices declining, the value of Indonesian commodity exports in 2012 will stagnate. From a peak in July-September 2011 the prices of most of Indonesia's commodity exports have declined. Export prices are lower in the first three months of 2012 than they were on average in 2011. As a result, export prices for 2012 are unlikely to rise and the value of Indonesian exports in 2012 will stagnate. By contrast, in 2011 net exports directly added 3.6% to Indonesian GDP and 5% if indirect effects are taken into account.²

End of Commodity Boom

From 2009 to 2011 the value of Indonesia's exports nearly doubled. Of the \$ 87 billion in increased exports, \$ 85 billion came from commodity exports, especially oil and gas, palm oil, rubber and coal.³ More remarkable, nearly three-quarters of the increase in the value of Indonesian exports came from increased prices for commodity exports and only one-quarter came from an increase in the quantity exported.

¹ World Bank: "Indonesia Economic Quarterly" June & December 2011 and April 2012

² The detailed basis for these calculations is available from the authors upon request. The model assumes that for non-commodity, manufactured exports [except for chemicals and fertilizer] the value in 2012 is the same as in 2011.

³ Export data from Papanek, Gustav F. "Exports at Current and Constant Prices, 1975 to November 2011 by Major commodities"

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The Papanek, Basri and Schydowsky model assumes that the quantity of most Indonesian commodity exports will increase in 2012. However, the model also assumes that prices for most commodity exports will decline in 2012. The major exception is the price of oil and petroleum products, which is expected to be higher than last year. The model assumes that export prices for such commodities as rubber, beverages and tin will fall by 15-20% and this is a major factor in balancing the increase in quantities exported. The small decline in prices forecast for such commodities as coal, copper and palm oil represent a sharp contrast to the commodity boom years, when prices for many export commodities increased by 20-40% per year.

Growth Forecasts for Indonesia in 2012

Most major forecasts for Indonesian GDP growth in 2012 are higher than the Papanek, Basri and Schydowsky model's projection of 5.8%. The main reason for this difference appears to be in different forecasts of export earnings. The World Bank projects that the value of goods and services exports will grow at 7.5% in 2012 while our model's projection is just 2%. The difference is on the order of \$ 10 billion or more than 1% of GDP. This fully explains the differences in the economic growth forecasts.

Other forecasts of Indonesian GDP growth tend to pay less attention to exports on the assumption that Indonesia is largely "decoupled" from the world economy. While international trade is a smaller share of Indonesia's economy than for other countries in the region, the Indonesian economy is nevertheless greatly affected by the world price of its exports and imports. The rather small reduction in export prices for commodities expected in 2012 would, if not compensated for, directly reduce GDP by \$ 25 billion compared to 2011, and by nearly \$ 40 billion, or almost 5% of national income, if indirect effects are taken into account.

Impact on the Poor in Indonesia

In Indonesia the poor benefited less than the non-poor from the rapid rate of economic growth over the last few years. This economic growth, which was largely caused by the commodity boom, produced rising prices but created few jobs for the poor. As a result, a large share of the increased income went to the owners of the means of production in the form of profits.⁴ Table 2 shows that during the period 2005 to 2010 the real annual income of the non-poor (top 60% of the income distribution) grew about 4 times faster than that of the poor (lowest 40% of the distribution): 4.9 % versus 1.2%.

Table 2: Growth in Consumption of the Poorest 40% and the Non-poor 60%

	1999–2005	2005–2010
Real annual rate of growth of per capita consumption of the poorest 40%	3.1%	1.2%
Real annual rate of growth of per capita consumption of the non-poor 60%	1.6%	4.9%

Growth Forecasts and Political Decisions

The difficulty of predicting the growth rate of the world economy is shown by changes in the forecasts by the World Bank. In just 6 months World Bank forecast for world growth was reduced by one-third and for Indonesian growth by 10% (Table 1). The reason for this is that future changes in the world economy are more subject to political decisions than in the past. For example, in the coming months world growth will be greatly affected by political decisions on such issues as: (a) the extent to which Europe continues to deal with its budgetary problems by cutting expenditures or by fostering growth; and (b) the extent to which the US Federal Reserve resumes its stimulus policies.

To predict the rate of world economic growth correctly one would need to predict how these and other political problems will be addressed. However, it is very difficult to predict how these political issues will be solved. Given the present uncertainty in the world economy, it is important to adopt flexible economic policies.

Policy Implications for Indonesia

In the past Indonesia has relied on commodity exports to drive export and GDP growth. In 1997 commodities were 56% of total exports; in 2011 they were 74%. Since commodity prices are quite volatile, this is a risky strategy in the present uncertain global environment.

If world growth slows, Indonesia will need programs for the poor that can be expanded and that are effective at reaching the poor. Two programs that meet these criteria are: cash transfers and PNPM. However, both of these programs have their weaknesses: cash transfers increase current income but do little to move families out of poverty and PNPM has not been effective in the urban areas. Moreover, neither of these programs can be expanded without additional funding. The Government needs a margin in the budget. But if the fuel subsidy reaches the Rph. 330 trillion now projected, it will be difficult to significantly expand any program for the poor.

⁴ From 2009 to 2011 remittances of investment income increased nearly \$ 13 billion, which excludes profits kept in the country. Profits sent abroad equaled 20% of the increase in export revenue due to increased prices.

Child Malnutrition in Indonesia

One of the most important non-income poverty indicators in the world is malnutrition. Malnutrition undermines economic growth and is one of the most important factors perpetuating poverty. In Indonesia child malnutrition is an acute health and social problem. According to the United Nations Children's Fund (UNICEF), more than one-third of all Indonesian children under the age of five suffer from stunting using the standard height-for-age measure. (Stunting refers to short height for age and generally shows the long-term effects of inadequate nutrition and poor health status). UNICEF data also show that about 15 percent of all Indonesian children under age five suffer from wasting using the standard weight-for-height measure. (Wasting refers to low weight for height and is a measure of acute or short-term exposure to low calorie intake and the effects of disease).

The level of child malnutrition in Indonesia is quite high relative to both the country's recent improvement in living conditions as well as to the situation prevailing in other neighboring countries. Table 3 shows that over the period 2003-2009 the prevalence of stunting was much higher in Indonesia (37) than either the Philippines (32) or Vietnam (33). The table also reveals that the level of wasting was higher in Indonesia (14) than in the Philippines (7) or Vietnam (10). In 2010 UNICEF ranked Indonesia as having the fifth largest number of children in the world under age five suffering from stunting.

Table 3. Child Malnutrition in Indonesia: Nutritional Measures for Children Under Age 5, 2003-2009 (in percent)

	Low Birth Weight	Under-weight (weight-for-age)	Stunting (height-for-age)	Wasting (weight-for-height)
Indonesia	9	18	37	14
Philippines	21	22	32	7
Vietnam	5	-	33	10

Source: United Nations Children's Fund (2012)

The immediate causes of the high level of child malnutrition in Indonesia are complex and varied. They include such factors as: low parental education; parental attitudes and behavior; declining rates of breastfeeding; poor complementary feeding practices, including a growing dependence on infant supplements; and the lack of fortified and healthy food options. Also, mothers are often anemic and underweight before becoming pregnant and this leads to a situation in which almost one-half of all preschool children in Indonesia

suffer from iron deficiency anemia (IDA).⁵ Finally, some evidence suggests that the demise of state-run nutrition programs (such as Posyandu centers) after decentralization in 2000 may have had a negative effect on the nutrition status of young children.

Factors Affecting Child Malnutrition in Indonesia

A study by Semba et al (2008) found that increased parental education had a large and significant effect on reducing child stunting in Indonesia. More formal education for the mother reduced the likelihood of child stunting in urban areas by about 5 percent, and more formal education for the father reduced the likelihood of stunting by 3 percent.

The health status of mothers at birth also has a very important impact on the nutritional status of children. In particular, maternal stunting, underweight and anemia can all have very long-term effects on the newborn child. In Indonesia, 23 percent of all women (15 and older) are underweight and 44 percent of all pregnant women suffer from iron deficiency anemia (IDA). These factors mean that more than 9 percent of all Indonesian infants are born with low birth weight, which is an important predictor of the child's future growth. Across Indonesia, the percentage of infants with low birth weight varies considerably. While the Millennium Development Goal (MDG) set a target of reducing the rate of low birth weight to 20 percent nationally, 17 provinces in Indonesia still have low birth weight rates of over 20 percent.

Low-birth-weight infants struggle, and in a resource-poor environment, this leads to child stunting. Stunting, which represents the cumulative effect of chronic and low intergenerational undernutrition, in turn leads to lower cognitive development and reduced economic productivity. According to Haddad and Bouis (1991), a 1 percent decrease in height is equal to a 1.4 decrease in agricultural productivity.⁶

Policy Interventions for Reducing Stunting in Indonesia

One of the easiest, and most effective, interventions to reduce stunting is to ensure that infants are: (1) exclusively breastfed for the first six months; and (2) then are given appropriate complementary feeding and continued breast feeding until two years of age. According to UNICEF, these two practices would reduce the rate of stunting in Indonesia by about 15

⁵ Because the Indonesian Demographic and Health Surveys do not collect data on iron deficiency anemia, the anemia rate on pregnant women is from the World Health Organization (WHO).

⁶Haddad, L. and Bouis, H., 1991, "The Impact of Nutritional Status on Agricultural Productivity: Wage Evidence from the Philippines," *Oxford Bulletin of Economics and Statistics*, Vol 53, No 1, pp. 46-68.

percent. While it is difficult to measure what constitutes “exclusive breastfeeding,” UNICEF data suggest that only 32 percent of Indonesian mothers exclusively breastfeed their infants during the first six months. Many mothers give their infants other food and drink—including infant formula, animal milk and honey—and these foods are much less nutritious than breast milk. Breast milk gets 40 to 55 percent of its energy from fat, and traditional and supplemental diets contain much less fat than this. Traditional and supplemental diets—including those focused on street foods—also tend to be low in energy density, micronutrients and amino acids. According to a study conducted in Jakarta’s poor communities, only 10 percent of infants were fed according to best practices concerning breastfeeding, and poor feeding practices for infants were pervasive across all income groups in these poor communities.⁷

In the past nutrition services in Indonesia and advice on infant and child feeding were offered—in theory—through the integrated services of the monthly Posyandu Program. Posyandu Centers, which were staffed by volunteers from the local community, were supposed to be responsible for child immunization, growth monitoring, nutrition counseling and supplemental feeding. However, in reality, most of these centers were never staffed by people with any training in

anthropometry, or in infant and young child feeding. Rather these centers functioned more as weighing stations and data collection points.

The post-2000 decentralization of government services poses a new set of challenges for the delivery of nutrition services through the Posyandu Centers. Now the Ministry of Health acts as an advisor to districts and provinces on all health and nutrition matters, but there seems to be a lack of capacity and leadership at most sub-national levels of government. Specifically, at the local level, it is not clear now who is in charge of delivering nutrition services and advice on infant and child feeding.

One much-needed step for improving the nutrition services provided by the Posyandu Centers would be to staff these centers with people who are trained in anthropometry and young child feeding. Trained specialists are very much needed at the local level in Indonesia to encourage young mothers to eat more nutritious foods during pregnancy and to breastfeed their infants for the first six months of life.

⁷USAID, 2010, “USAID/Indonesia Nutrition Assessment for 2010 New Project Design, Washington, DC, page 15.